

U.S. Application No. 10/073,138
Preliminary Amendment dated November __, 2004
Attorney Ref. No.: 037003 - 0280705

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-28 are canceled, and new claims 29-56 are submitted in their place.

1-28. (Canceled)

29. (New) A method for inhibiting or preventing T cell/B cell interactions associated with B cell lymphoma comprising administering an amount of a monoclonal anti-CD80 antibody or a CD80-binding fragment thereof sufficient to inhibit the binding of B cells and T cells via the CD80/CD28 pathway;

wherein said monoclonal antibody or fragment thereof binds specifically to CD80 antigen without inhibiting the binding of CD80 antigen to CTLA-4.

30. (New) The method of Claim 29, wherein said anti-CD80 antibody is a human monoclonal antibody, or a chimeric antibody comprising variable regions of a non-human anti-CD80 antibody and human constant regions.

31. (New) The method of Claim 30, wherein said anti-CD80 antibody is a chimeric antibody comprising variable regions of a monkey antibody and human constant regions.

32. (New) The method of Claim 31, wherein said chimeric anti-CD80 antibody comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

33. (New) The method of Claim 30, wherein said chimeric anti-CD80 antibody comprises light and heavy chain variable region amino acid sequences selected from the group consisting of:

the light and heavy chain variable region amino acid sequences of antibody 7C10 shown in Fig. 3A (SEQ ID NO:1) and in Figs. 3b and 3c (SEQ ID NO:2), respectively; and

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the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively.

34. (New) The method of Claim 33, wherein said chimeric anti-CD80 antibody comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

35. (New) The method of Claim 34, wherein said chimeric anti-CD80 antibody comprises the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively, and a human gamma 1 constant region.

36. (New) The method of Claim 29, wherein said monoclonal anti-CD80 antibody or a CD80-binding fragment thereof competes for binding to CD80 antigen with antibody 7C10 or antibody 16C10.

37. (New) The method of Claim 29, comprising administering a CD80-binding fragment of a monoclonal antibody that binds specifically to CD80 antigen without inhibiting the binding of CD80 antigen to CTLA-4.

38. (New) The method of Claim 37, wherein said CD80-binding antibody fragment is selected from the group consisting of Fab, F(ab')₂, and Fv.

39. (New) The method of Claim 37, wherein said CD80-binding antibody fragment comprises variable regions of a monkey or human antibody.

40. (New) The method of Claim 39, wherein said CD80-binding antibody fragment comprises light and heavy chain variable region amino acid sequences selected from the group consisting of:

the light and heavy chain variable region amino acid sequences of antibody 7C10 shown in Fig. 3A (SEQ ID NO:1) and in Figs. 3b and 3c (SEQ ID NO:2), respectively; and

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the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively.

41. (New) The method of Claim 29, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunomodulator selected from the group consisting of IL-7, IL-10, CTLA4-Ig, soluble CTLA-4, an anti-CD28 antibody or fragment thereof.

42. (New) The method of Claim 29, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunosuppressant selected from the group consisting of cyclosporin A, FK506, anti-TNF α , anti-CD54, anti-CD11, anti-CD11a, anti-IL-1, TNF α receptor, and IL-1 receptor.

43. (New) A method of treating B cell lymphoma in a subject in need of such treatment by administering a therapeutically effective amount of a monoclonal anti-CD80 antibody or a CD80-binding fragment thereof that does not inhibit the CD80/CTLA-4 binding interaction.

44. (New) The method of Claim 43, comprising administering a human monoclonal anti-CD80 antibody, or a chimeric anti-CD80 antibody comprising variable regions of a non-human anti-CD80 antibody and human constant regions.

45. (New) The method of Claim 44, comprising administering a chimeric anti-CD80 antibody that comprises variable regions of a monkey antibody and human constant regions.

46. (New) The method of Claim 45, comprising administering a chimeric anti-CD80 antibody that comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

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47. (New) The method of Claim 44, comprising administering a chimeric anti-CD80 antibody that comprises light and heavy chain variable region amino acid sequences selected from the group consisting of:

the light and heavy chain variable region amino acid sequences of antibody 7C10 shown in Fig. 3A (SEQ ID NO:1) and in Figs. 3b and 3c (SEQ ID NO:2), respectively; and

the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively.

48. (New) The method of Claim 47, comprising administering a chimeric anti-CD80 antibody that comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

49. (New) The method of Claim 48, comprising administering a chimeric anti-CD80 antibody that comprises the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively, and a human gamma 1 constant region.

50. (New) The method of Claim 43, comprising administering a monoclonal anti-CD80 antibody or a CD80-binding fragment thereof that competes for binding to CD80 antigen with antibody 7C10 or antibody 16C10.

51. (New) The method of Claim 43, comprising administering a CD80-binding fragment of a monoclonal antibody that binds specifically to CD80 antigen without inhibiting the binding of CD80 antigen to CTLA-4.

52. (New) The method of Claim 51, comprising administering a CD80-binding fragment selected from the group consisting of Fab, F(ab')₂, and Fv.

53. (New) The method of Claim 51, comprising administering a CD80-binding antibody fragment that comprises variable regions of a monkey or human antibody.

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54. (New) The method of Claim 53, comprising administering a CD80-binding antibody fragment that comprises light and heavy chain variable region amino acid sequences selected from the group consisting of:

the light and heavy chain variable region amino acid sequences of antibody 7C10 shown in Fig. 3A (SEQ ID NO:1) and in Figs. 3b and 3c (SEQ ID NO:2), respectively; and

the light and heavy chain variable region amino acid sequences of antibody 16C10 shown in Fig. 5a (SEQ ID NO:5) and in Figs. 5b and 5c (SEQ ID NO:6), respectively.

55. (New) The method of Claim 43, comprising administering said anti-CD80 antibody or CD80-binding fragment in combination with an immunomodulator selected from the group consisting of IL-7, IL-10, CTLA4-Ig, soluble CTLA-4, an anti-CD28 antibody or fragment thereof.

56. (New) The method of Claim 43, comprising administering said anti-CD80 antibody or CD80-binding fragment in combination with an immunosuppressant selected from the group consisting of cyclosporin A, FK506, anti-TNF α , anti-CD54, anti-CD11, anti-CD11a, anti-IL-1, TNF α receptor, and IL-1 receptor.